See Brazil list 25M.
Mozambique 28M.
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CONTENTS

Discoveries and Current Events. — Argentine Republic: The 'Mancha Bacteriana' of the Tomato, p. 25. – Brazil: Diseases of Cultivated or Useful Plants, Observed in the State of São Paulo, p. 25. – Mozambique: Fungi, Bacteria and Diseases of Unknown Origin Observed in the Colony, p. 28. – Italian Somaliland: Locust Movements, p. 30. – Switzerland: The Colorado Beetle Situation in 1939, p. 31.

Legislative and Administrative Measures. — Germany, p. 32. – Germany (Protectorate of Bohemia and Moravia), p. 33. – Germany (Prussia), p. 34. – Germany (Thuringia), p. 35. – Chili, p. 35. – Great Britain, p. 35. – Italy, p. 35. – Morocco (French Zone of), p. 35. – Union of South Africa, p. 36.

Recent Bibliography, p. 37.

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DISCOVERIES AND CURRENT EVENTS *

ARGENTINE REPUBLIC

The ' Mancha Bacteriana ' of the Tomato †

Investigations have been carried out by Dr. Lydia S. Spaini, of the Phytopathological Division at the Ministry of Agriculture, with a view to determining the causal agent of the ' mancha bacteriana ' of the tomato in the Republic.

This disease appears on the leaves in the form of small dark green spots, soaked in aspect, which become somewhat circular in shape with a translucent yellow border; on the young fruits green or brown blotches appear, surrounded by a thin dark ring and when the fruits ripen, the part around the lesion remains green.

A series of inoculations on tomato leaves, stems and fruits giving positive results obtained proved that this disease is caused by *Phytomonas vesicatoria* (*Bacterium vesicatorium*).

BRASIL

Diseases of Cultivated or Useful Plants, Observed in the State of São Paulo §

This is the second list of diseases of cultivated or useful plants studied at the Laboratory of Plant Pathology of the São Paulo Biological Institute in 1937-38 (for the first list, see this *Bulletin*, 1937, No. 12, pp. 269-275 and 1938, No. 3, pp. 49-53). The diseases reported in the previous list and observed again in 1937-38 are not cited.

The recognition of the diseases and pests enumerated in the list below was made by the author of this communication and by Messrs. Raul Drummond Gonçalves and Spencer Corrêa de Arruda, assistants at the aforesaid Institute.

* Under this and the next heading the countries are arranged in French alphabetical order,

† Communication from the official correspondent of the Institute, Mr. JUAN B. MARCHIONATTO, Agricultural Engineer, Director of the 'Sanidad Vegetal', Ministry of Agriculture, Buenos Aires, Argentine Republic.

§ Communication from the official correspondent of the International Institute of Agriculture, Mr. AGESILAU A. BITANCOURT, Assistant Director of the Biological Institute, Ministry of Agriculture, Industry and Commerce of the State of São Paulo, Brazil.

EXIX, 329

WINTER-CHERRY (*Physalis alkekengi* L.).	*Entyloma physalidis* (Kalkbr. and Cke.) Wint.
GROUNDNUT (*Arachis hypogaea* L.).	*Sphaceloma arachidis* Bitancourt and Jenkins.
AVOCADO (*Persea americana* Mill.).	*Cephaleuros mycoidea* Karst.
BANANA (*Musa* spp.).	*Chloridium musae* G. Stahel. *Polyporus sapurema* A. Möller.
COFFEE (*Coffea arabica* L.).	Leaf and fruit spots (virus).
SUGAR CANE (*Saccharum officinarum* L.).	*Pyrenochaeta sacchari* Bitancourt.
CITRUS (*Citrus* spp.).	*Elsinoe australis* Bitancourt and Jenkins. *Rhizoctonia* sp., *Pythium* sp., *Fusarium* sp., *Colletotrichum gloeosporioides* Penz. *Botryosphaeria ribis* Grossenb. and Duggar. *Fusarium* sp.
EUCALYPTUS (*Eucalyptus* spp.).	*Coniothecium* sp.
GUAVA (*Psidium guayava* L.).	*Sphaceloma* sp.
JASMIN (*Jasminum sambac* L.).	*Elsinoe jasmini* Bitancourt and Jenkins.
IVY (*Hedera helix* L.).	*Vermicularia trichella* Fr.
MAIZE (*Zea mays* L.).	*Sphaerulina maydis* P. Henn. *Myriogenospora aciculisporae* Vizioli.
MANGO (*Mangifera indica* L.).	*Sphaceloma* sp.
CASSAVA (*Manihot utilissima* L.).	*Rosellinia* ? *bunodes* B. and Br.
CARNATION (*Dianthus caryophyllus* L.).	*Sclerotium rolfsii* Sacc.
BARLEY (*Hordeum vulgare* L.).	*Ustilago hordei* (Pers.) K. and S.
PEPPER (*Capsicum annuum* L.).	*Colletotrichum* sp.
CASHEW-NUT (*Anarcadium occidentale* L.).	*Cercospora anacardii* Müll. and Chupp. *Gloeosporium* sp.
CASTOR-OIL PLANT (*Ricinus communis* L.).	*Ceratostomella* sp., *Fusarium orthoceras* var., *Phytophthora* sp. *Alternaria* sp.

TEA (*Thea sinensis* L.).	*Elsinoe theae* Bitancourt and Jenkins.
GRAPE VINE (*Vitis* spp.).	*Leptothyrium pomi* Mont.
ABUTILON STRIATUM Dicks.	*Sphaceloma* sp.
ACHRAS SAPOTA L.	*Elsinoe* sp.
AGAVE AMERICANA L.	*Rhynchostoma* sp.
ANONA CHERIMOLIA Mill. and *A. SQUAMOSA* L.	*Sphaceloma* sp.
AVERRHOA CARAMBOLA L.	*Sphaceloma* sp.
BOUGAINVILLEA SPECTABILIS Willd.	*Bacterium* sp.
CENTROLOBIUM ROBUSTUM Mart.	*Sphaceloma* sp.
CHORISIA SPECIOSA St. Hil.	*Phyllactinia* sp.
CLETHRA BRASILIENSIS Cham.	*Elsinoe clethrae* Bitancourt and Jenkins.
CUCUMIS ANGURIA L.	*Puccinia cucumeris* P. Henn.
ERYTHRINA RETICULATA Mart.	*Sphaceloma* sp.
EUGENIA PITANGA Ki.	*Elsinoe pitangae* Bitancourt and Jenkins.
FICUS LUSCHNATHIANA Miq.	*Sphaceloma* sp.
HICORIA PECAN (Marsch.) Britt.	*Elsinoe randii* Jenkins and Bitancourt.
JAMBOSA VULGARIS DC.	*Puccinia jambosae* P. Henn.
LUCUMA CAIMITO DC.	*Pestalozzia* sp. ? Virus. *Uredo* sp.
MACHAERIUM sp.	*Pseudothis subcoccodis* (Speg.) Theiss.
MYRCIARIA JABOTICABA Berg.	*Sphaceloma* sp.
OCOTEA PULCHELLA Mart.	*Drepanoconis larviformis* Speg.
PASPALUM PLICATULUM Mich. and *P. PROLIFERUM* Arech.	*Claviceps paspali* Stev. and Hall.
PAVONIA SPINIFEX (L.) Cav.	*Sphaceloma* sp.
RHUS VERNIX L.	*Sphaceloma rhois* Bitancourt and Jenkins.

MOZAMBIQUE

Fungi, Bacteria and Diseases of Unknown Origin Observed in the Colony *

The following is a list of the fungi, bacteria and diseases of unknown origin observed in the Colony of Mozambique. The author of this report was assisted by Mr. J. Peres Guimarães.

Citrus sinensis (L.) Osbeck	*Oospora citri-aurantii* Ferraris.
	Melanosis (cause unknown).
	Psorosis (cause unknown).
	Foliocellosis (cause unknown).
C. nobilis Lour.	Melanosis (cause unknown).
C. limonia Osbeck	*Cephaleuros mycoidea* Karst.
Prunus persica Stokes	*Alternaria* sp.
	Phyllosticta prunicola Sacc.
P. domestica L.	*Cephaleuros mycoidea* Karst.
Pyrus malus L.	*C. mycoidea* Karst.
Persea gratissima Gaertner	*C. mycoidea* Karst.
Ficus carica L.	*Cercospora* sp.
Morus sp.	*Phyllactinia corylea* (Pers.) Karst.
	Capnodium sp.
Carica papaya L.	*Phyllactinia corylea* (Pers.) Karst.
Carya pecan Engl. and Graebn. . . .	*Cercospora fusca* Rand.
Gelonium adenophorum Muell. Arg.	*Capnodium* sp.
Afzelia quanzensis Welw.	*Septoria* sp.
	Phyllactinia corylea (Pers.) Karst.
Magnolia grandiflora L.	*Cephaleuros mycoidea* Karst.
Eucalyptus citriodora Hooker . . .	*C. mycoidea* Karst.
Tristania conferta R. Brown . . .	*C. mycoidea* Karst.
Ricinus communis L.	*Melampsorella ricini* (Biv. and Bern.) De Toni.
	Cercosporina ricinella (Sacc. and Berl.) Speg.
Coffea arabica L.	*Hemileia vastatrix* B. and Br.
	Cercospora coffeicola B. and Cke.
	Capnodium sp.
	Cladosporium herbarum Link.

* Communication from the official correspondent of the Institute, Mr. JÚLIO GARDÉ ALFARO CARDOSO, Laboratory of Mycology of the 'Repartição Técnica de Agricultura', Lourenço Marques, Mozambique.

Jasminum odoratissimum L.	*Capnodium* sp.
Gardenia sp.	*Capnodium* sp.
Chrysanthemum sp.	*Septoria chrysanthemella* Sacc.
Gerbera sp.	*Cercospora* sp.
Solanum lycopersicum L.	*Colletotrichum phomoides* (Sacc.) Chester.
	Bacterium solanacearum (E. F. Smith) E. F. Smith, 1914.
Nicotiana tabacum L.	Leaf curl (cause unknown).
	Mosaic (cause unknown).
Vicia faba L.	*Alternaria* sp.
Vicia sp.	*Erysiphe polygoni* DC.
Manihot utilissima Pohl	*Septogloeum manihotis* Zimm.
Vitis vinifera L.	*Plasmopora viticola* (Berk. and Curt.) Berlese and de Toni.
Zea mays L.	*Sorosporium reilianum* (Kühn) McAlp.
	Fusarium sp.
	Diplodia zeae (Schw.) Lév.
Hordeum sp.	*Ustilago hordei* (Pers.) Kell. and Sw.
	Helminthosporium teres Sacc.
Oryza sativa L.	*Helminthosporium* sp.
Cocos nucifera L.	*Fusarium* sp.
	Diplodia palmicola Thunb.
	Pestalozzia palmarum Cke.
Chamaerops sp.	*Helminthosporium* sp.
	Capnodium sp.
Musa sp.	*Thielaviopsis paradoxa* (De Seynes) von Höhn.
	Gloeosporium musarum Cke. and Massee.
	Fusarium sp.
	Cordana musae (Zimm.) von Höhn.
	Mosaic (cause unknown).
Medicago sativa Mor.	*Uromyces striatus* Schr.
Arachis hypogaea L.	*Cercospora personata* (B. and C.) Ellis.
	Rosette (cause unknown).
Gossypium sp.	*Bacterium malvacearum* E. F. Smith.
Anarcadium occidentale L.	*Cephaleuros mycoidea* Karst.
Conopharyngia elegans Stapf	*Puccinia callistea* Syd.
Phragmites sp.	*Puccinia phragmites* (Schum.) Korn.
Various host plants	*Rhizopus migricans* Ehrenb.
	Aspergillus niger v. Tiegh.

ITALIAN SOMALILAND

Locust Movements *

From June 1 to 2, 1939, a large swarm from the north-eastern zone of Rangi passed over Dolo towards Barrei.

On the 3rd, a heavy invasion, also egg-laying, was reported in the Uelscimbirrò zone, situated on the frontier of the Bur Acaba and Audegle territory, and in the Doi region.

On the 4th, another swarm from Goriamo (Malca Rieh) directed towards Barabir and Aulihan again flew over Dolo; no egg-laying.

On the same day, a large swarm was reported in the Imi zone flying towards Carrei.

On the 5th, a large swarm from the left bank of the Ganale Doria moved towards the west, flying over Lamascillindi and continuing in the direction of Elemedo.

On the 7th and 8th, another swarm from Imi, taking a north-easterly direction, flew over Nascidle.

On the 10th, a small swarm was observed passing over Aramaio territory continuing towards Buslei without stopping.

On the same day, a large swarm flew over the Arcadei district, near Callafo for three hours; there was no egg-laying and little damage. The swarm continued towards the north-east. In the afternoon, another large swarm passed over Mustahil towards Scillave, in the Bor Bare and Ghel zones; there was no egg-laying.

On the 13th, a large swarm was reported over Callafo and Uebi Scebeli; on the 14th, the swarm continued its route, one part towards Gabredarre and the other towards Scillave where some damage was caused.

On the 15th, near Tigieglò, several swarms were observed in the Biolei, Cal, Drersin and Corar districts, though no egg-laying took place. On the same day, a small swarm was seen between Beira and Dubdub, part of which continued towards the south and the remainder towards the north.

On the 18th, a large swarm arrived at Gabredarre.

Since that date, no further appearances have been recorded.

In the invaded area, control operations carried out up to June 28 by the staff of the Agricultural Services, assisted by the local authorities and the natives, gave satisfactory results.

The traditional systems of control adopted by the natives (ditches) were supplemented by scientific methods applied by the European staff and supervised by workers and technicians of the Agricultural Services.

* Communication from Dr. Luigi Bozzi, Chief of the Agricultural Services of Italian Somaliland, Mogadiscio, transmitted to the Institute by the Government of the Colony.

SWITZERLAND

The Colorado Beetle Situation in 1939 *

Despite the very wet and cold weather unfavourable for the development of the Colorado beetle (*Leptinotarsa decemlineata*) in Switzerland, during June and July, 1939, a very severe invasion was reported chiefly in the cantons of French Switzerland bordering France, In German Switzerland, the outside limit fixed last year has been considerably exceeded, and there are now some foci in the cantons of Saint-Gall, Obwalden and Zug.

The following table gives the foci reported in French Switzerland up to July 10, and in German Swizterland up to July 15; in the cantons of Geneva, Vaud, Neuchâtel and Berne (Jura), the foci have become too numerous to count:—

French Switzerland.

Geneva	41	communes	infested	with	about	2,000	foci	(under control).
Vaud	348	,,	,,	,,	over	4,500	,,	,, ,,
Neuchâtel	59	,,	,,	,,	about	2,000	,,	,, ,,
Bernese Jura	100	,,	,,	,,	,,	3,000	,,	,, ,,
Fribourg	154	,,	,,	,,	,,	1,060	,,	,, ,,
Valais	8	,,	,,	,,	,,	22	,,	,, ,,
Total	710	communes	infested	with	approximately	12,000	foci.	

German Switzerland.

Zurich	20	communes	infested	with	27	foci	(under control).
Bern (excluding Jura)	76	,,	,,	,,	194	,,	,, ,,
Luzern	30	,,	,,	,,	81	,,	,, ,,
Obwalden	1	,,	,,	,,	1	,,	,, ,,
Zug	1	,,	,,	,,	4	,,	,, ,,
Solothurn (about)	82	,,	,,	,,	283	,,	,, ,,
Basel-Stadt	2	,,	,,	,,	18	,,	,, ,,
Basel-Land	45	,,	,,	,,	175	,,	,, ,,
Schaffhouse	3	,,	,,	,,	3	,,	,, ,,
Saint-Gall	1	,,	,,	,,	1	,,	,, ,,
Aargau	72	,,	,,	,,	194	,,	,, ,,
Total	333	communes	infested	with about	194	foci.	

* Communication from Dr. F. T. WAHLEN, Director of the Federal Agricultural Experiment Station, Zurich-Oerlikon, Switzerland.

Extensive surveys have been carried out in all the districts and control measures are being continued according to the methods prescribed by the International Committee for the Mutual Study of the Control of the Colorado Beetle. Combined applications of lead arsenate and Bordeaux mixture are usually employed.

LEGISLATIVE AND ADMINISTRATIVE MEASURES

Germany. — By virtue of an Ordinance dated August 10, 1939, the variety of potatoes 'Erstling', not resistant to wart disease [*Synchytrium endobioticum*] may be cultivated over an area of 1200 hectares for the production of certified seed, in spite of the previous Ordinance of September 16, 1937, concerning the elimination of varieties of potatoes not resistant to this disease [see this *Bulletin*, 1938, No. 2, p. 28]. However, the permission to grow these potatoes is limited to certain administrative units that are expressly stated in the Ordinance. (*Amtliche Pflanzenschutzbestimmungen*, Berlin, 7. Dezember 1939, Bd. XI, Nr. 7, S. 172-173).

*** Notification of September 20, 1939 modifying the seventh Decree of May 4, 1939, [see this *Bulletin*, 1939, No. 7, pp. 157-159] relative to the Colorado beetle [*Leptinotarsa decemlineata*], authorizes the introduction of rooted plants free from adhering soil during the period from October 10 to November 14 on the same conditions fixed by the said Decree for imports made during the period November 15-March 31. (*Nachrichtenblatt für den Deutschen Pflanzenschutzdienst*, Berlin, Anfang Oktober 1939, 19. Jahrg., Nr. 10, S. 97).

*** By Ordinance of September 1939, the Ministry of Agriculture, inasmuch as inspection of the nurseries in the Sudeten region for San José scale [*Aspidiotus perniciosus*] showed no trace of this insect, authorizes the phytosanitary restrictions relative to the trade in plants between the Sudeten region and the rest of Germany to be lifted. (*Ibid.*, S. 97-98).

*** By Decree of October 11, 1939, countrary to the hunting regulations of July 3, 1934, the use of gins is permitted until further order. Persons concerned must however apply for special permission from the competent authorities. (*Ibid*, S. 175).

*** By Decree of October 25, 1939, the regulations for the preservation of natural sites and in particular the following:—

(1) The Law of June 26, 1935, relative to the protection of natural sites [see this *Bulletin*, 1935, No. 10, p. 226].

(2) The Decree of October 31, 1935, relative to the application of the aforesaid Law [see this *Bulletin*, 1936, No. 1, p. 7].

(3) The Decree of March 18, 1936, relative to the protection of wild animals and plants [see this *Bulletin*, 1936, No. 7, p. 147].

(4) The Decree of March 17, 1937, relative to the ringing of birds, are made applicable to Sudetenland. (*Amtliche Pflanzenschutzbestimmungen*, 1. Dezember 1939, Nr. 7, S. 173-174).

*** By Decree of October 26, 1939, the Clauses of the Decree of October 29, 1937, referring to the control of the pests and diseases of fruit trees [see this *Bulletin*, 1938, No. 5, pp. 100-101], come into force in the Ostmark (formerly Austria) and in the Sudetenland. (*Ibid.*, S. 173).

*** By a ministerial order of November 4, 1939, based on the Decrees of March 28, 1929 and September 30, 1932 [see this *Bulletin*, 1929, No. 6, p. 83, and 1932, No. 12, p. 205] which aim at preventing the introduction of carnation leaf roller [*Tortrix pronubana*], the importation of carnations (cut flowers) is permitted after November 15, 1939. (*Nachrichtenblatt für den Deutschen Pflanzenschutzdienst*, Aufang Dezember 1939, Nr. 12, S. 108-109).

*** By Ordinance of November 21, 1939, the president of the Biological Institute (Biologische Reichsanstalt für Land– und Forstwirtschaft), Berlin-Dahlem, is authorised to consider requests to import plant and vegetable products and to make the necessary decisions on the subject. The Minister of Agriculture however reserves the right to deal with the most important cases.

The Ordinance also covers the importation of vines, dealt with in the Decree of December 23, 1935, [see this *Bulletin*, 1936, No. 4, pp. 79-80] which set up rules for the Law on grape phylloxera control. (*Amtliche Pflanzenschutzbestimmungen*, 1. Dezember 1939, Nr. 7, S. 172).

Germany (Protectorate of Bohemia and Moravia). — By Decree No. 137 of April 28, 1939 the destruction of *Berberis vulgaris* and *Mahonia* [*B.*] *Aquifolium* is made compulsory.

The necessary work must be carried out by the tenant or proprietor of the land at his own expence or, if he refuses to do so, it will be carried out by the local authorities the cost still being chargeable to him.

The destruction must be thorough, it is recommended that the plants be grouted out by the roots and burnt at once.

Exemptions may be granted by the Minister of Agriculture, however, in such a case the person concerned is expected to watch the plants spared carefully and to notify at once any sympton of fungus attack that may be observed. (*Amtliche Pflanzenschutzbestimmungen*, Berlin, 1. Dezember 1939, Bd. XI, Nr. 7, S. 178-180).

*** By Decree No. 143 of May 19, 1939, the destruction of wild hop bines (*Humulus lupulus*) is made compulsory in the communes recognized officially as producers of hops and in neighbouring communes.

The necessary work must be carried out by the land owner or the tenant and, if not carried out by them, it will be done by the local authorities but at the expence of the person concerned.

The plants must be pulled out by the roots unless too much damage to the crop invaded by the wild hops would be caused by such methods. In such a case it will be necessary to destroy only the aerial part of the weed.

The Plant Protection Station at Praag and Brünn are entrusted with the technical supervision of the application of the above measures in Bohemia and Moravia.

The delegates of the central organisation that determines the condition of the hop crops, those of the local hop growers organisations and the officers of the Plant Protection Stations mentioned above will examine crops in order to detect stools of wild hop. They will invite the owner of the land to be present when they carry out their inspection but it may also take place in his absence. (*Ibid.*, S. 180-183).

*** By Ordinance No. 186 of July 20, 1939, relative to hop downy mildew (*Pseudoperonospora humuli*), which is valid in all communes where hops are grown, the landowners and tenants are bound to control the disease effectively, they must:—

(*a*) Cut out and destroy the young shoots of plants attacked by downy mildew;

(*b*) Provide pickets of at least 1 m 50 and bind the hop shoots up them when these are at a suitable stage of development;

(*c*) Remove, as soon as possible after picking, and in any case before the leaves yellow, all the old bines remaining in the hop garden. They should then be disposed of in such a way that all risk of infection is avoided;

(*d*) The bines should be treated with fungicidal sprays (*Ibid.*, S. 183-186).

*** By ordinance No. 205 of August, 1939 hunters are asked to confirm to certain specified rules. (*Ibid.*, S. 185-187).

Germany (Prussia). — By Decree of September 29, 1939, coming into force October 14, 1939, the control of the winter moth and the mottled umber moth [*Chematobia brumata, Hibernia defolearia*] is made compulsory in certain districts of the province Silesia.

Hard fruit and stone-fruit trees, with the exception of peach trees, must be provided with grease bands which remain adhesive for three months. The trees must be banded before October 15 each year and the bands removed and burnt before March 15 of the subsequent year. The portion of the trunk covered by the band must be treated with carbolineum (tar oil).

An annexe to the Decree contains detailed regulations for the application of the grease bands. (*Amtliche Pflanzenschutzbestimmungen*, Berlin, 1. Dezember 1939, Bd. XI, Nr. 7, S. 176-178).

Germany (Thuringia). — A Notification of October 12, 1939, modifying the provisions of the Notification of February 17, 1939 [see this *Bulletin*, 1939, No. 7, p. 161], allows the cultivation of the following varieties of potatoes, which are not resistant to wart disease [*Synchytrium endobioticum*], in the year 1940: 'Erstling', 'Industrie' and 'Zwickauer frühe Gelbe'. This permission however, does not apply to certain communes specifically mentioned. (*Amtliche Pflanzenschutzbestimmungen*, Berlin, 1. Dezember 1939, Bd. XI, Nr. 7, S. 178).

Chili. — The Decree No. 629 of September 27, 1939, modifies the Decree No. 105 of February 11, 1925, which contains regulations relating to the Decree-Law No. 177 of December 31, 1924, which concerns the phytosanitary police. The modification governs the amount of dodder seeds that may be tolerated in lucerne and clover seed. (*Diario Oficial de la Republica de Chile*, Santiago, 18 de octubre de 1939, año LXII, núm. 18, 492, pág. 2774).

Great Britain. — An Act of July 28, 1939, which may be cited as the Prevention of Damage by Rabbits Act, 1939, makes provision for the prevention of damage by these rodents and amends the Law relating to the use of poison and the use of spring traps above ground for the purpose of killing hares or rabbits.

This Act shall not extend to Scotland, to Northern Ireland or to the administrative county of London. (*Prevention of Damage by Rabbits Act, 1939. 2 & 3 Geo. 6. Ch. 43*, London, 1939, 6 pp.).

Italy. — Two Ministerial Decrees of October 5 and 7, 1939, declare the communes of Ripatransone, Massa Fermana and Falerone, Province of Ascoli Piceno, to be infested with grape phylloxera. (*Gazzetta Ufficiale del Regno d'Italia*, Roma, 18 ottobre 1939, anno 80°, n. 244, p. 4885).

*** By two Ministerial Decrees of October 19 and 21, 1939, the communes of Monterubbiano, Province of Ascoli Piceno, and Serrone, Province of Frosinone, are declared to be infested with grape phylloxera. (*Ibid.*, 31 ottobre 1939, n. 254, p. 5062).

*** The Ministry of Agriculture and Forests has published a list of the communes in the Kingdom that were declared to be, or suspected of being, infested with grape phylloxera on December 31, 1939. (*Bollettino Ufficiale del Ministero dell'Agricoltura e delle Foreste*, Roma, 21 dicembre 1939, anno XV, n. 33, pp. 2775-2792).

Morocco (French Zone of). — By Vizirial Decree of October 16, 1939, (2 ramadan 1358) relative to the measures for the control of the pink cotton bollworm (*Platyedra gossypiella*) and the spiny bollworm (*Earias insulana*), everyone engaged in cotton-growing, for any purpose whatsoever, is required to burn all stalks, leaves, bolls, unharvested seed, and any other cotton plant trash remaining on the fields. This operation must be carried out on the fields

immediately after harvesting and, at the latest, prior to a date which will be fixed each year by Decree of the Director General of the Economic Services.

Land under cotton the previous year should be kept in good condition, and in particular, kept free from plants of the family Malvaceae.

On no account must cotton plant trash, especially plants, stalks, leaves, bolls and seed, be taken away from the cotton fields.

Cotton must be ginned before April 1 of the year following harvesting. A Decree of the Director General of the Economic Services will indicate the date on which this measure will come into force.

In the ginneries, cotton plant trash and waste accumulating during ginning and also sweepings, must be carefully collected and burnt immediately.

Only ginned and baled cotton, baled lint and treated seed may be dispatched outside the ginnery, and no other cotton, seed, waste and sweepings.

Cotton seed must be treated with heat, this operation to be carried out immediately after ginning.

The necessary apparatus for this purpose must be installed in each ginnery.

The seeds must be treated at a temperature of at least 55° C. and for a period not less than five minutes.

The apparatus must be provided with an automatic regulator and a thermometer for daily recording.

The seed must be packed in sacks as soon as removed from the apparatus and, while still hot, the sacks must be closed and sealed.

With the exception of treated seed kept in sealed bags and compressed baled cotton and lint, which may be stored in the ginneries, the storage and transport of ginned cotton, and lints not pressed or baled, unginned cotton, and untreated seed after April 15 of the year following harvesting are prohibited. (*Bulletin Officiel*, Rabat, 20 octobre 1939, XVIII[e] année, n° 1408, p. 1618).

*** A Decree of the Director General of the Economic Services, dated October 16, 1939, relative to the regulation of cotton seed production and distribution, establishes that seed producers shall comply, *inter alia*, with the measures proposed by the Government authorities, particularly in regard to the certification of their crops and the seed obtained. This certification depends chiefly on the healthy and clean condition of the crops, on the quality and germinative power of the seeds.

The certified seeds, after having been checked for quality at the Centre for Agricultural Research, will be issued to the official associations for disinfection and for distribution to the European and native planters. (*Ibid.*, p. 1619).

Union of South Africa * — With a view to preventing the distribution of the bacterial blight of vines (*Bacillus vitivorus*) into the Union, Proclamation No. 50 of March 14, 1939, withdraws the exemption of vines in certain di-

* From a communication of Mr. C. P. VAN DER MERWE, Chief Inspector, Plant Regulatory Service, Division of Plant Industry, Department of Agriculture and Forestry, Pretoria, Union of South Africa.

stricts in the Province of the Cape of Good Hope from the restrictions on the removal of plants, prohibits the removal of vines or parts thereof infected with *B. vitivorus* and prohibits the removal of vines or other plants of the family Vitaceae or parts thereof within or out of the districts of Somerset West, Stellenbosch, Worcester and Wynberg, except with the written permission from an officer of the Department of Agriculture and Forestry.

Government Notice No. 366 of March 17, 1939, withdraws the exemption from registration of vine nurseries in the districts referred to above and Government Notice No. 367 of same date required the registration of vine nurseries in these same districts before April 15, 1939.

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